INSTALLATION INSTRUCTIONS

BROAN® *Elite*

HB0040

MODEL E661

⚠INTENDED FOR DOMESTIC COOKING ONLY⚠

READ AND SAVE THESE INSTRUCTIONS

INSTALLER: LEAVE THIS MANUAL WITH HOMEOWNER.
HOMEOWNER: USE AND CARE INFORMATION ON PAGES 7 AND 8.

Broan-NuTone LLC; Hartford, Wisconsin www.broan.com 800-558-1711
Broan-NuTone Canada; Mississauga, Ontario www.broan.ca 877-896-1119

REGISTER YOUR PRODUCT ON LINE AT: www.broan.com/register

V06112 rev. I

⚠ WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.
2. Before servicing or cleaning unit, switch power off at service panel and lock service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
3. Installation work and electrical wiring must be done by qualified personnel in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. Follow the heating equipment manufacturer's guidelines and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
5. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
6. Ducted fans must always be vented to the outdoors.
7. Do not use this unit with any additional solid-state speed control device.
8. To reduce the risk of fire, use only metal ductwork.
9. This unit must be grounded.
10. When the federal, provincial or state legislation comprises more restrictive installation and/or certification requirements, the aforementioned requirements prevail on those of this document and the installer agrees to conform to these at his own expenses.

TO REDUCE THE RISK OF A RANGE TOP GREASE FIRE:

a) Never leave surface units unattended at high settings. Boilovers cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.

b) Always turn hood ON when cooking at high heat or when flambeing food (i.e.: Crêpes Suzette, Cherries Jubilee, Peppercorn Beef Flambé).

c) Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter.

d) Use proper pan size. Always use cookware appropriate for the size of the surface element.

⚠ WARNING

TO REDUCE THE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE TOP GREASE FIRE, OBSERVE THE FOLLOWING*:

1. SMOTHER FLAMES with a close-fitting lid, cookie sheet or metal tray, then turn off the burner. BE CAREFUL TO PREVENT BURNS. IF THE FLAMES DO NOT GO OUT IMMEDIATELY, EVACUATE AND CALL THE FIRE DEPARTMENT.
2. NEVER PICK UP A FLAMING PAN – You may be burned.
3. DO NOT USE WATER, including wet dishcloths or towels – This could cause a violent steam explosion.
4. Use an extinguisher ONLY if:
   - **A.** You own a Class ABC extinguisher and you know how to operate it.
   - **B.** The fire is small and contained in the area where it started.
   - **C.** The fire department has been called.
   - **D.** You can fight the fire with your back to an exit.

* Based on "Kitchen Fire Safety Tips" published by NFPA.

CAUTION

1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. To avoid motor bearing damage and noisy and/or unbalanced impeller, keep drywall spray, construction dust, etc. off power unit.
3. Your hood motor has a thermal overload which will automatically shut off the motor if it becomes overheated. The motor will restart when it cools down. If the motor continues to shut off and restart, have the hood serviced.
4. The minimum hood distance above cooktop must not be less than 24". A maximum of 30" above cooktop is highly recommended for best capture of cooking impurities.
5. Two installers are recommended because of the large size and weight of this hood.
6. To reduce the risk of fire and to properly exhaust air, be sure to duct air outside – Do not exhaust air into spaces within walls or ceiling or into attics, crawl space or garage.
7. This product is equipped with a thermostat which may start blower automatically. To reduce the risk of injury and to prevent power from being switched on accidentally, switch power off at service panel and lock or tag service panel.
8. Because of the high exhausting capacity of this hood, you should make sure enough air is entering the house to replace exhausted air by opening a window close to or in the kitchen.
9. Use with approved cord-connection kit only.
10. Please read specification label on product for further information and requirements.

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WARRANTY

BROAN-NUTONE LLC ONE-YEAR LIMITED WARRANTY

Broan-NuTone LLC warrants to the original consumer purchaser of its products that such products will be free from defects in materials or workmanship for a period of one year from the date of original purchase. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

During this one-year period, Broan-NuTone LLC will, at its option, repair or replace, without charge, any product or part which is found to be defective under normal use and service.

This warranty does not cover (a) normal maintenance and service or (b) any products or parts which have been subject to misuse, negligence, accident, improper maintenance or repair (other than by Broan-Nutone LLC), faulty installation or installation contrary to recommended installation instructions.

The duration of any implied warranty is limited to the one-year period as specified for the express warranty. Some states or provinces do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

BROAN-NUTONE LLC'S OBLIGATION TO REPAIR OR REPLACE, AT BROAN-NUTONE LLC'S OPTION, SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. BROAN-NUTONE LLC SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH PRODUCT USE OR PERFORMANCE. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

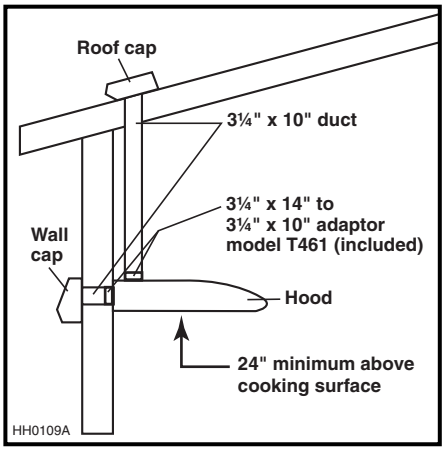
This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state or province to another. This warranty supersedes all prior warranties.

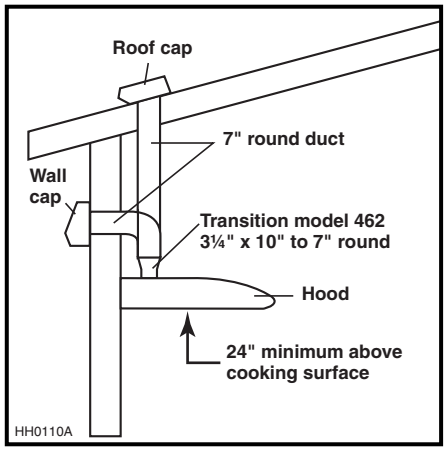
To qualify for warranty service, you must (a) notify Broan-NuTone LLC at the addresses or telephone number stated below, (b) give the model number and part identification and (c) describe the nature of any defect in the product or part. At the time of requesting warranty service, you must present evidence of the original purchase date.

Broan-NuTone LLC, 926 West State Street, Hartford, WI 53027 USA 1-800-558-1711
Broan-NuTone Canada Inc., 1140 Tristar Drive, Mississauga, ON L5T 1H9 CANADA 1-888-896-1119

1. INSTALL DUCTWORK

Plan where and how the ductwork will be installed.
Install proper-sized ductwork, elbows and roof or wall cap. Use 2” duct tape to seal duct joints.
The minimum hood distance above cooktop must not be less than 24”. A maximum of 30” above cooktop is highly recommended for best capture of cooking impurities.
Distances over 30” are at the installer and users discretion.





2. PREPARE THE INSTALLATION

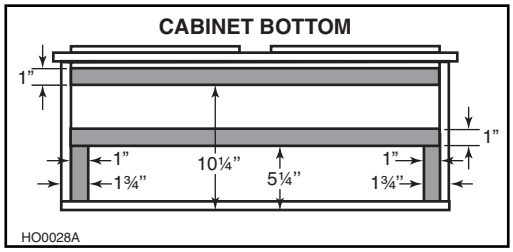
Make sure that the following items are included:

- Hood
- Accessories:
    - Filters (2 for 30” and 36” width hoods)
    - Plastic diverter (assembled in hood)
    - T461 3¼” x 14” to 3¼” x 10” adapter/damper (inside one filler)
    - Bag of parts (inside one filler) including:
      (1) wire clamp, (5) no. 8 x 1/2” screws, (2) wire connectors and (3) no. 6 x 1/2” standard screws

Parts sold separately:

- Shielded halogen lights (MR16, GU10, 120 V, 50 W)
- Transition 3¼” x 10” to 7” round model no. 412 (optional), ducts, elbows, dampers, wall or roof caps.

NOTES: 1. During installation, protect countertop and/or cooktop.
2. If the bottom of the cabinet is recessed, attach four 1” wide wood strips (not included), as shown below, in order to properly attach the hood to the cabinet. The wood strips must be as thick as recess.



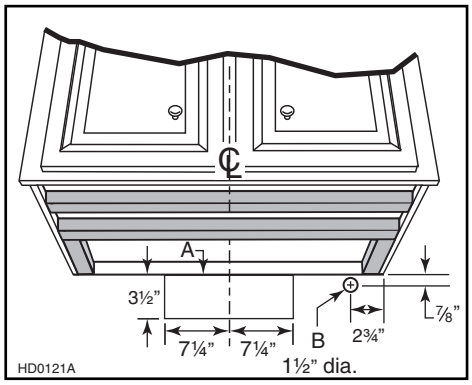
2. PREPARE THE INSTALLATION (CONT'D)

Cut-out the openings for duct (**A**) and power cable (**B**), in cabinet or wall, according to the direction of discharge chosen.

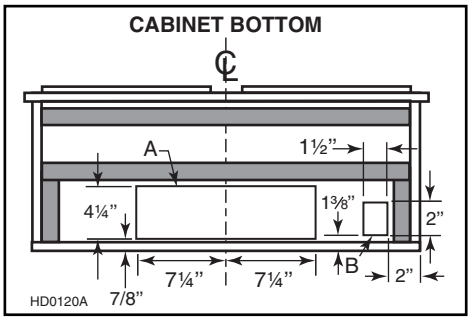
See figures below.

NOTE: The duct opening width (**A** on figures below) is 10½", centered.

HORIZONTAL DISCHARGE

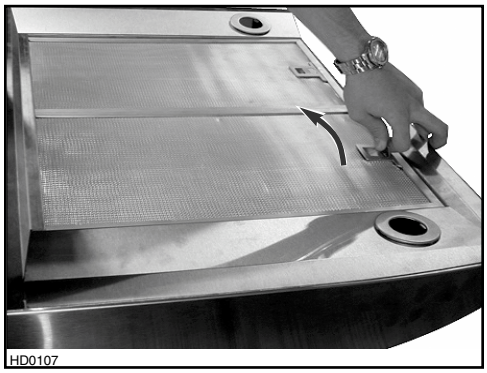


VERTICAL DISCHARGE



3. PREPARE THE HOOD

3.1 Pull latch tabs and remove filters from the hood.



3.2 Remove the 5 screws retaining the bottom panel to the hood and set aside. Pull out the bottom panel.

3.3 Punch out the appropriate electrical knock-out hole.

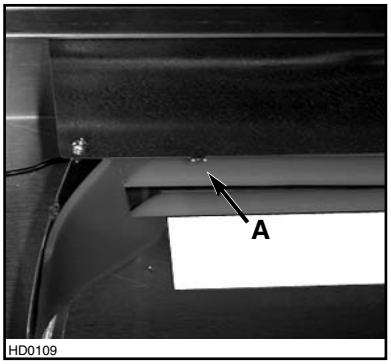
3. PREPARE THE HOOD (CONT'D)

FOR VERTICAL DISCHARGE ONLY:

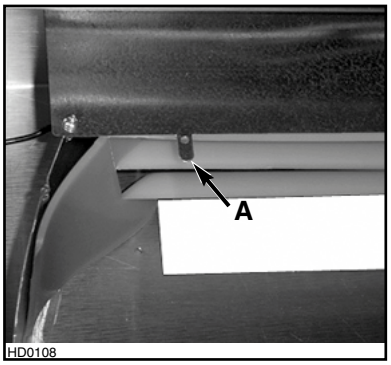
The hood is set up at the factory for vertical discharge. Go to step 4 on page 7. Start on step **4.4**.

FOR HORIZONTAL DISCHARGE ONLY:

3.4 From inside the hood, unfold the small retaining tab **(A)** (located on the edge of the blower opening) on the air diffuser edge. See pictures below.

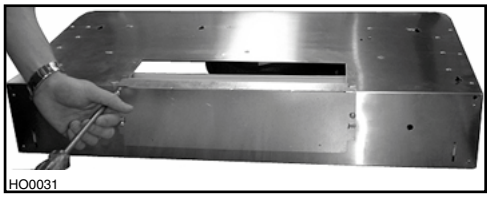


Folded tab

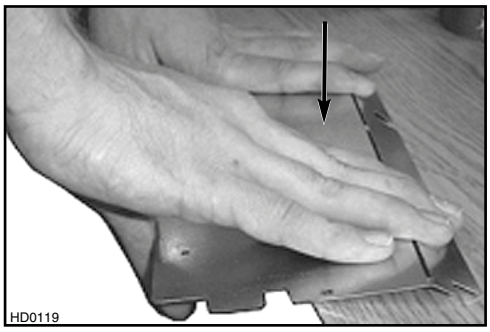


Unfolded tab

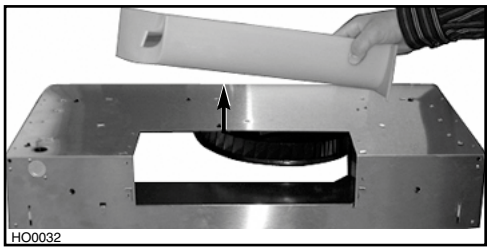
3.5 Remove the metal shutoff plate from the back of the hood, by removing the 3 screws. Set aside scews.



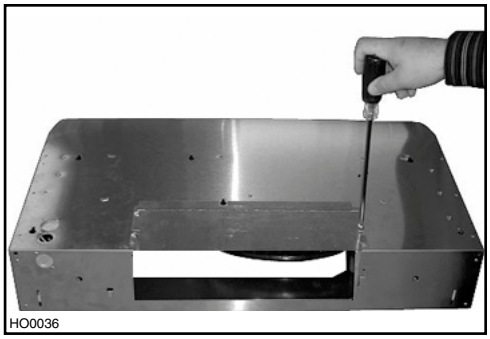
3.6 Press the metal shutoff plate on a flat surface to completely flatten bent flange.



3.7 From the top of the hood, slide out the plastic air deviator and discard.



3.8 Using the 3 screws removed from **3.5**, install the metal shutoff plate on top of the hood.

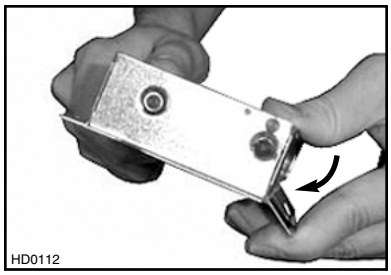


4. INSTALL THE ADAPTER/DAMPER

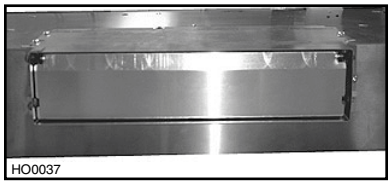
The wall duct must be roughed-in to properly interface with the hood. Before performing the installation, make sure the adapter fits easily in the duct. If this hood replaces an existing hood, please note that location of the air exhaust can vary from one hood manufacturer to another.

FOR HORIZONTAL DISCHARGE ONLY:

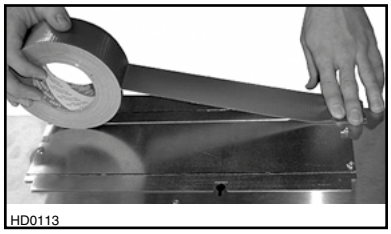
4.1 Fold down the foldable flange of the adapter/damper. This flange must be at 90° from the remaining flanges. See picture beside.


HD0112

4.2 Using three (3) no. 6 x 1/2" screws provided, secure the adapter to the back of the hood. Remove tape from damper flap.

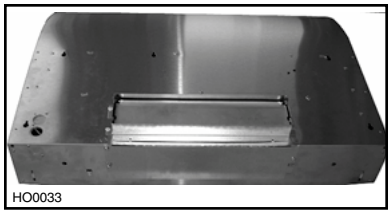

HO0037

4.3 Seal the adapter and the metal shutoff plate to the hood using duct tape.

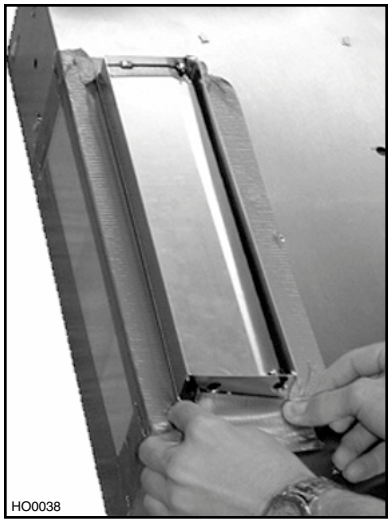

HD0113

FOR VERTICAL DISCHARGE ONLY:

4.4 Using three (3) no. 6 x 1/2" screws provided, secure the adapter to the top of the hood. Remove tape from damper flap.


HO0033

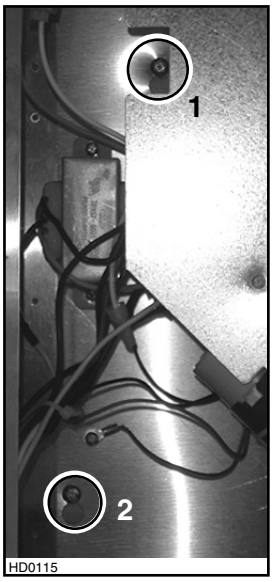
4.5 Seal the adapter and the metal plate to the hood using duct tape.

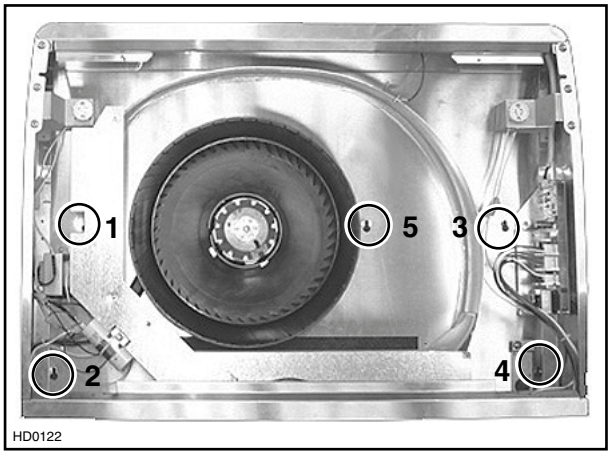

HO0038

5. INSTALL THE HOOD

5.1 Run power cable to installation location. Position the hood in its intended location. Using a pen, mark the position of the screws (smaller part of the keyholes, see pictures below for the (5) keyholes locations). Remove the hood.

5.2 Install (4) no. 8 x 1/2" screws, leaving a 1⁄8" gap (do not install the no. 5 screw yet).





5.3 Attach the wire clamp, insert the power cable in the hood and tighten the wire clamp to secure the cable. Place the hood under the cabinet and slide it in position. Make sure the adapter/damper assembly enters the duct opening. Tighten the (4) screws completely, then add the last screw (screw no. 5) in the center keyhole. Make sure the damper flap opens freely.

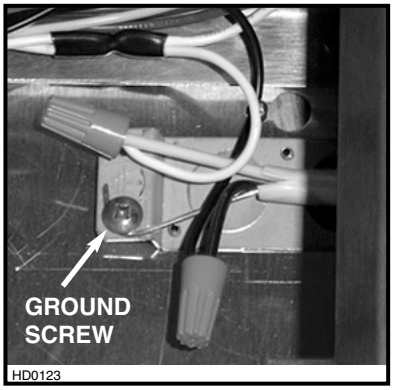
6. CONNECT WIRING

⚠ WARNING

Risk of electrical shock. Electrical wiring must be done by qualified personnel in accordance with all applicable codes and standards. Before connecting wires, switch power off at service panel and lock service disconnecting means to prevent power from being switched on accidentally.

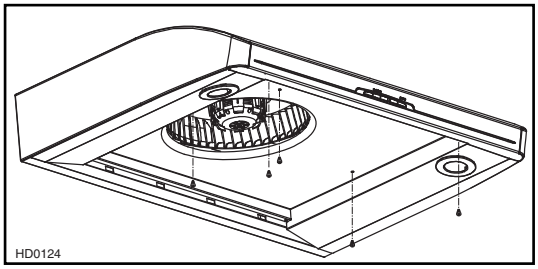
Connect cable into wiring box using provided wire connectors.

Connect wires as follows: BLACK to BLACK, WHITE to WHITE and GREEN or BARE wire under GREEN ground screw. **DO NOT FORGET TO CONNECT THE GROUND**.



7. REINSTALL BOTTOM PANEL

Reinstall the bottom panel, using 5 screws saved from step 3, as shown beside. Reinstall filters.


HD0124

CAUTION

Remove protective plastic film covering filters before installing them.

8. LIGHT BULBS

This hood must use 120 V, 50 W max., type MR16, GU10 shielded halogen lamps. (**Purchase separately**).

⚠ WARNING

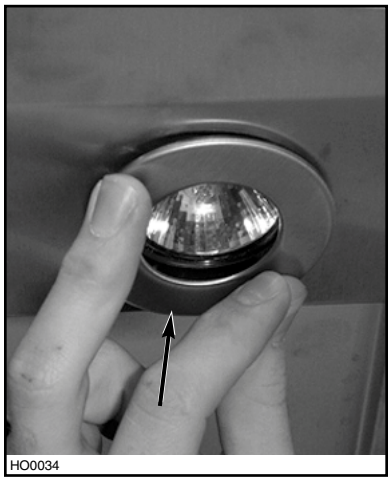
In order to prevent the risk of personal injury, do not install a lamp identified for use only in enclosed fixtures.

NOTE: The rings must be removed from bottom banel before installing halogen lamps.

8.1 Install the lamps by placing the bulb leads into their grooves in the socket and gently push upward and turn clockwise until secured.

HE0047

8.2 Install trim rings by pushing upward.


HO0034

⚠ WARNING

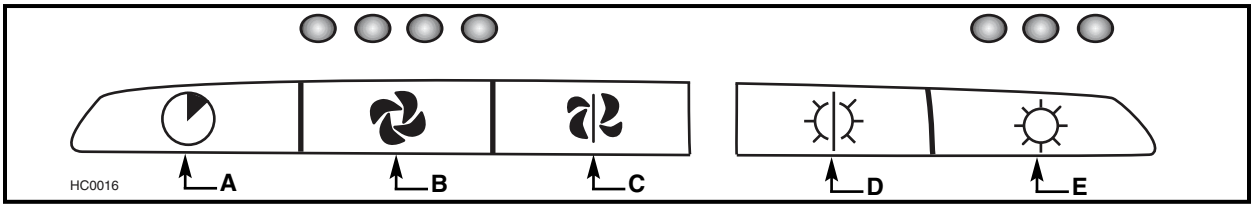
In order to prevent the risk of personal injury, the halogen lamps must be cooled down before removing them.

8.3 To remove lamps, gently push upward and turn counterclockwise to disengage bulb leads from their grooves.

HE0047

9. OPERATION

Always turn your blower on before you begin cooking to establish an air flow in the kitchen. Let the blower run for a few minutes to clear the air after you turn off the range.



A) Blower Delay switch
B) ON blower / Speed control switch
C) OFF blower / Filter maintenance switch
D) OFF lighting
E) Halogen light switch

A. BLOWER DELAY SWITCH:

When a speed is selected, press the delay switch to activate the delay function. The corresponding speed indicator LED will start flashing to indicate this function is activated. The fan will continue to operate for 5 minutes and will stop automatically. To cancel the delay function, press the blower delay switch once again; the blower will then work in normal mode.

NOTE: The blower speed can be increased—or decreased—during delay mode without starting another 5-minute cycle.

B. ON BLOWER / SPEED CONTROL SWITCH:

Press this switch to turn on the blower at the last selected speed. To change the blower speed, press the switch again until the desired speed is obtained.

NOTES: 1. Each time you press the speed control switch, the speed changes by increments of 1 (e.g.: speed 1 to speed 2, to speed 3, and then speed 4.) From the fourth speed, the speed goes down to level 1.
2. The last speed used is kept in memory so that when the unit is turned on, it will return to the last setting except the fourth, the next time the blower will be turned on, it will return to speed 3.

HEAT SENTRY™

This hood is equipped with a Heat Sentry thermostat. This thermostat is a device that will turn on or speed up the blower if it senses excessive heat above the cooking surface.

1) If blower is OFF—it turns blower ON to speed 3.
2) If blower is ON at a lower speed setting—it turns the blower up to speed 3. If blower is at Boost, HEAT SENTRY™ turns blower down to speed 3.

When HEAT SENTRY™ is activated, the first and the last speed blower LEDs are flashing alternately.

When the temperature level drops to normal, the blower will return to its original setting.

⚠ WARNING

The HEAT SENTRY™ can start the blower even if the hood is turned OFF. In this case, it is impossible to turn the blower OFF with blower switch. To prevent the blower from starting, turn off power at the main electrical panel.

C. OFF BLOWER / FILTER MAINTENANCE SWITCH:

Press this switch to turn off the blower. Pressing this switch also cancels the delay function (if activated).

NOTE: After 25 hours of operation, all blower LEDs will flash during 30 seconds to indicate the filters need to be cleaned in order to maintain efficient hood operation. The LEDS will continue to flash until the function is reset by pressing on this switch for 3 seconds.

D. OFF LIGHTING:

Press this switch to turn off lighting.

E. HALOGEN LIGHT SWITCH:

Press this switch to turn on the halogen lamps. The lighting intensity changes by increments of 1 (e.g.: Press once for low intensity, once again to get more, up to three times.) From the higher intensity, press once to go back to the lower intensity.

NOTE: The last lighting intensity used is kept in memory. The next time the halogen lamps will be turned on, they will light with the last intensity used.

RESET CONTROL PROCEDURE:

If ever the control locks up, turn off power at the main electrical panel for 5 seconds. Then, turn on power at the main electrical panel. The control will be reset.

10. USE AND CARE

Grease filters and bottom panel.

The grease filters and the bottom panel should be cleaned frequently. Use a warm detergent solution.

Remove grease filters by pushing them towards the back of hood and rotating downward.

Clean all-metal filters in the diswasher using a non-phophate detergent. Discoloration of the filter may occur if using phosphate detergents, or as a result of local water conditions — but this will not affect filter performance. This discoloration is not covered by the warranty.

STAINLESS STEEL CLEANING: HOW TO MAINTAIN ITS « BRIGHT LOOK »

Do: - Regularly wash surfaces with clean cloth or rag soaked with warm water and mild soap or liquid dish detergent.
- Always clean in the direction of original polish lines.
- Always rinse well with clear water (2 or 3 times) after cleaning. Wipe completely dry.
- You may also use a specialized household stainless steel cleaner.

Don't: - Do not use any steel or stainless steel wool or any other scrapers to remove stubborn dirt.
- Do not use any harsh or abrasive cleansers.
- Do not allow dirt to accumulate.
- Do not let plaster dust or any construction residues reach the hood. During construction or renovation, cover the hood to make sure no dust adheres to stainless steel surface.

Avoid: when choosing a detergent

- Any cleaners that contain **bleach** will attack stainless steel.
- Any products containing : **chloride**, **fluoride**, **iodide**, **bromide** will deteriorate surfaces rapidly.
- Any **combustible products** used for cleaning such as **acetone**, **alcohol**, **ether**, **benzol**, etc., are highly explosive and should never be used close to a range.

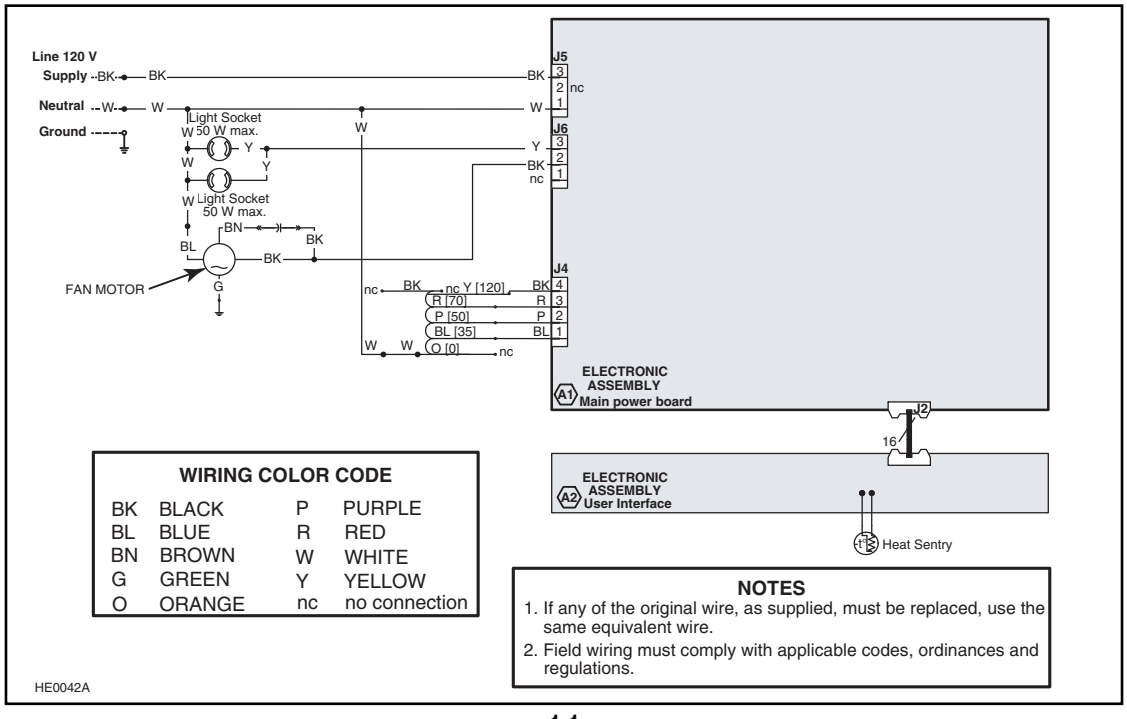
ENAMEL FINISH:

Clean with warm water and mild detergent only. If discoloration occurs, use a good enamel polish such as automotive polish. (DO NOT use rough abrasive cleaner or porcelain cleaner).

11. WIRING DIAGRAM

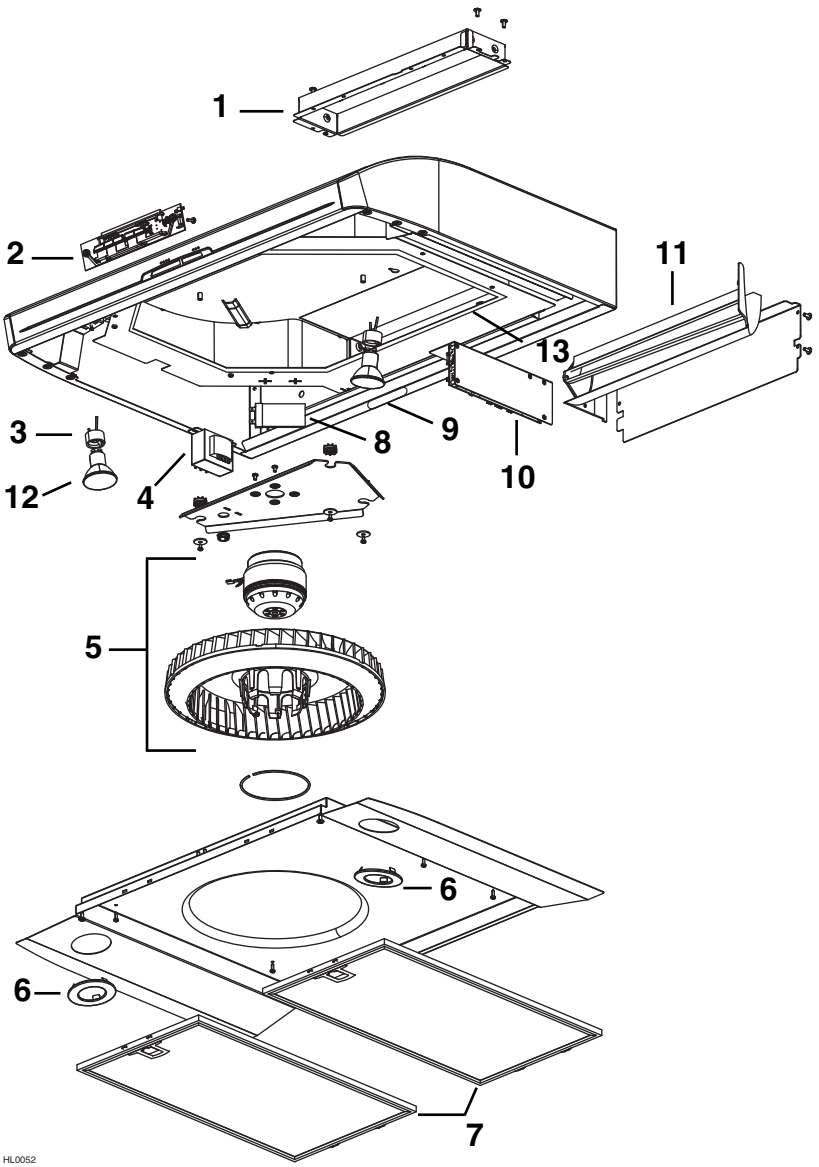
⚠ WARNING

Risk of electrical shock. Electrical wiring must be done by qualified personnel in accordance with all applicable codes and standards. Before connecting wires, switch power off at service panel and lock service disconnecting means to prevent power from being switched on accidentally.



12. SERVICE PARTS

E661 MODEL



KEY NO.	PART NO.	DESCRIPTION	WIDTHS	
			30”	36”
1	T461	ADAPTER/DAMPER	1	1
2	V06118	ELECTRONIC CONTROL	1	1
3	V05917	LAMP SOCKET	2	2
4	V06735	TRANSFORMER AND HARNESS KIT	1	1
5	V01766E	MOTOR (INCLUDING WHEEL)	1	1
6	V06268	LIGHT TRIM RING	2	2
7	V06244	FILTERS 9.92” x 17.981”	2	-
	V06264	FILTERS 12.922” x 17.981”	-	2
8	V02160	CAPACITOR	1	1
9	V06750	BROAN ELITE LOGO	1	1
10	V06733-1	CONTROL PROCESSOR UNIT	1	1
11	V06252	DIVERTER	1	1
12	V05921	HALOGEN LAMP (50 W, 120 V, GU10)	2	2
13	V03443	FOAM STRIP	1	1
*	V06734	LOW VOLTAGE HARNESS	1	-
	V06745	LOW VOLTAGE HARNESS	-	1
*	V06112	INSTALLATION MANUAL	1	1
*	V06751	PARTS BAG (1) wire clamp LP16-AP, (2) wire connectors no. 74B, (5) no. 8 x 1/2” screws, (3) no. 6 x 1/2” screws)	1	1

* Item not shown.